

REMARKS

Favorable reconsideration of the subject application as amended above is respectfully requested in view of the comments below.

Claims 1-5, 7-14 and 16 are canceled herein and replaced with new claims 20-24. Support for new claims 20-24 is found at pages 3-5 and 9 and in the examples. No new matter is added by these amendments to the claims.

It is respectfully submitted that the cancellation of claim 4 renders the objection to this claim moot. Similarly, the rejection of claims 1-5, 7-14 and 16 under 35 U.S.C §112, first paragraph, the rejections of claims 1-5 and 7-14 under 35 U.S.C § 112, first paragraph, the rejection of claims 1-5, 7-14 and 16 under 35 U.S.C § 112, second paragraph and the objection to the specification and claim 1 are rendered moot by the cancellation of the claims at issue.

Claim 16 is rejected under 35 U.S.C § 102(b) as being anticipated by Van Herle et al., as evidenced by Schmutzler. It is respectfully submitted that cancellation of claim 16 renders this rejection moot.

It is respectfully submitted that the new claims meet the requirements of 35 U.S.C § 112, first and second paragraphs and that these claims are free of the cited prior art.

The present invention is directed to methods for inducing the re-expression of a previously silenced gene encoding the human sodium/iodide symporter in a human thyroid carcinoma cell by administering a compound selected from 5-azacytidine, sodium butyrate, dimethylsulfoxide, S-adenosyl-1,8-diamino-3-thio-octane, and phenylacetate. Applicants' studies have shown that these demethylating agents or differentiating agents can restore transcription of a previously inhibited iodide transporter gene, thus restoring iodide transport.

Serial No.: 09/606,042

Moreover, applicants' studies have demonstrated restoration of gene expression in a variety of human thyroid carcinoma cells.

Accordingly, it is respectfully submitted that the present application, as amended, is in condition for allowance, an early notification thereof being earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY



Judith L. Toffenetti
Reg. No. 39,048

600 13th Street, N.W.
Washington, DC 20005-3096
(202) 756-8000 JLT:apr
Date: August 15, 2003
Facsimile: (202) 756-8087